How nature has inspired famous works of music

isten to nature and you might hear trees rustling, rain falling or bees buzzing. Maybe you hear bolder sounds, such as thunder and lightning, waves crashing, or the roar of a fire.

When composers listen to nature, they hear those sounds – and they also hear music!

The natural world has inspired composers to write many famous works of music. Melodies, harmonies, and musical dynamics can combine to create the image of a dramatic storm at sea, the soft twinkling of starlight, or the quiet majesty of an everyday sunrise.

We hear nature all the time — but music allows us to appreciate it with a sense of wonder and awe.

Atlanta Symphony Orchestra

Joseph Young, Conductor

A New Day: Ferde Grofe



American composer Ferde Grofé

Have you ever woken up before dawn to watch the sunrise?

Ferde Grofé (Fur-dee Groh-FAY) did! When he was a young man, he took a trip to the Grand Canyon.

"I first saw the dawn because we got there the night before and camped," he recalled. "I was spellbound in the silence... because as it got lighter and brighter you could hear the birds chirping and nature coming to life. All of a sudden, bingo! There it was, the sun. I could hardly describe in words because words would be inadequate."

Grofé became a famous jazz pianist and a musical arranger for a jazz orchestra. When he achieved his dream of becoming a composer, writing scores for television and films, he tackled describing that sunrise — through music.

His *Grand Canyon Suite* depicts different scenes inside the canyon. Listen to the "Sunrise" movement and you'll hear the full experience of the sun rising, exactly as it did that morning when Grofé was a young man.

Playing with Fire: Falla and the Fire Dance

Spanish composer Manuel de Falla (MAHN-well day-FAH-yah) was much admired in Spain. He is best remembered for his "Ritual Fire Dance," an excerpt from a ballet called "El Amor Brujo" or "The Bewitched Love." Falla took his inspiration from tales of the traditional fire-dance to honor the pagan fire-god. Dancers would literally jump through or leap around open flames.

Don't try this at home! Instead, listen to see if the melody and the rhythms suggest the wild, unpredictable flicker of open flames.

Spanish composer Manuel de Falla

and the Sound of Sunrise

Program Music: Painting with Sound

When a painter creates a painting, he or she makes a lot of decisions. They have to choose the colors, the quality of the paint, the right canvas, the brush strokes, and a certain style. In the same way, composers use several tools to create a specific image with music.

Musical Instruments

Composers choose the best instrument for the job. An orchestra contains four groups of musical instruments: brass, strings, woodwinds, and percussion. Each instrument has different qualities. A violin can be soaring and stirring. Drums can be pounding and driving. A flute can be faint and elusive. Composers get to choose!



If the song is about a tree, do you choose a drum, a violin, a trumpet, or a clarinet?

Rhythm

Rhythm refers to the pattern of long and short notes contained in a musical phrase. The percussion, or the drums, aren't the only instruments with a beat! Any instrument can add to the rhythm.



If the song is about a river, should we keep the music constant, steady, and even - or should we give it some rhythm?

Tempo

A composer also decides the tempo, meaning the speed at which music is performed. The tempo can change too, getting faster or slower or faster again.



This song is about a storm. What's the tempo? Is it fast or slow — or does it change back and forth?

Dynamics

Dynamics are the instructions a composer puts in a score to control when the musicians should play loud and louder – or soft and softer – or maybe louder again. Sometimes composers indicate how the musicians should actually play the instruments — whether "legato" (leg-GAH-toh) for long and sustained notes, "staccato" (stah-KAH-to) for short and quick notes, or "pizzicato" (PITZ-ih-KAH-toh) for short and plucked notes.



This song is about the sun. Should it start loud and get louder? Or soft and get softer? Or a mixture of both? Maybe long and sustained? Or short and quick?

Major and minor keys

A major key suggests a brighter mood and a minor key suggests a darker and sometimes sadder mood. A composer can shift between major keys and minor keys throughout a work.



If this song is about the sea, do we use a major key or a minor key? Or shift between major and minor?

Program Music: Images and Stories in Sound

"Program music" is a term used to describe instrumental music that tells a story, describes a setting, or relates a legend. The word "program" here is like a television "program."

Many composers create abstract patterns of sound not intended to depict anything other than music itself. Of course, the sounds might trigger images, ideas, and moods depending on the listener's response.

Program music is different because the composer deliberately intends to describe a specific image or event, using only sound.



Down by the River: Sm

Rivers have always been an important resource for communities for farming, fishing, travel – and because they're fun!

Czech composer **Bedřich Smetana** (BED-rick SMET-ah-na) had a deep love for his homeland. The Moldau is a famous river that runs from a mountainside, through the Czech countryside, through the city of Prague, and finally merging with the Elbe at Mělník. In his musical tribute to the Moldau, Smetana follows the river from its source as it swells from a stream into a river, and passes people and events on the banks. Smetana even forces his melody over white water rapids!

> Trans pour vist

Row, Row: Debussy's "In the Boat"

French composer **Claude Debussy** (Clohd DEB-you-see) is known as a leading figure in an artistic movement called Impressionism – but Debussy didn't like the label of "Impressionist." Instead of painting specific pictures with his music, Debussy's goal was to compose work that created the mood of an experience. When you listen to his "In the Boat," you might not picture the actual boat so much as you sense the experience of bobbing along the surface of the water.

etana and his Moldan





A REALING CONTRACTOR





What is your favorite thing about winter?

For Italian composer Antonio Vivaldi (An-TONE-ee-oh Viv-VAHL-dee), it was ice-skating and warm, toasty fires. He set out to write a set of four violin concertos titled "The Four Seasons," one for each season, including "Winter." A concerto is a composition that showcases the talent and skill of a solo performer, in this case, a violinist. Vivaldi filled his "Winter" concerto with images of birds, frozen landscapes, and ice-skating children.

Button Up: Rossini's "Storm"

Some people love a big storm full of thunder and lightning!

And a big storm is what you get from Italian composer **Giacchino Rossini** (Joe-ah-KEE-noh Roh-SEE-knee). The "Storm" is an excerpt from his William Tell Overture and Rossini uses the entire orchestra to recreate the full force of a sudden rainstorm, including timpani and trombones.

Rossini's "Storm" is so popular that you might recognize it from television, films, and even cartoons!

"The Storm" from the Overture to "William Tell"



ldi in the Winter

Earth, Wind, Air, & Fires Create a Classroom Orchestra!

Ancient Greek scientists believed nature was based on four elements: earth, air, water, and fire. Let's write music that sounds like earth, air, water, or fire!

Step One: Bring a recyclable object to the classroom. It could be a water bottle, a stick, bubble-wrap, cardboard, even a dog food container! Anything at all - but be sure to recycle it after the exercise. Save the planet!

Step Two: Your teacher will grant permission to explore the sound potential in your object. Does it whistle when you blow across it? Does it rattle or have a scratchy surface? Does it thump? Does it crunch? The sounds don't have to be loud but they should be clear and distinct. Any single object makes plenty of sounds!

Step Three: Your teacher will divide students into small groups of four or five members. Once you have your group, introduce your object and demonstrate all the music potential you have discovered.

Step Four: Your teacher will assign a "secret" theme to your group: earth, air, water, or fire. Don't tell the other groups what your theme is! Instead, use your objects to create a soundscape – a repeated pattern of eight to ten sounds – that paints a picture of your theme.

Step Five: Present your sound-scape to the classroom and see if your classmates can guess whether it represents earth, air, water, or fire. Once your theme has been identified, explain the choices that you made to create that particular effect.

CREATE YOUR OWN RAIN STICK!



4. Seal the open end with duct tape.

5. When you slowly tilt the tube from side-toside, it should imitate the sound of rainfall!

Keach for the Stars!: Williams" "Star Wars" Theme

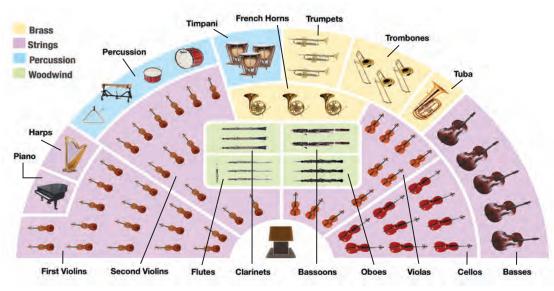
Put yourself deep into outer space. Out among the stars. What does that sound like?

You're probably thinking of music written by American composer John Williams! His Star Wars theme is one of the most identifiable and successful movie scores of all-time.

Real astronauts would probably report that space travel sounds like beeps, buzzers, and silence. With William's music, however, space is heroic, mysterious, adventuresome, inspiring, and victorious – as exciting as a brass fanfare and as soaring as a string section.

Meet the orchestra - and how it creates sound!

An orchestra is comprised of four sections, representing four different types of instruments.



Here comes the brass!

The brass section contains horns, trumpets, trombones, and a tuba. Brass instruments deliver the loud, exciting parts of the music. They are also used to create epic swells and sudden bursts of sound.

The sound comes from the musician's lips. The player places his or her lips tightly against the mouthpiece and blows a blast of air, sending a vibration down the tube of the instrument. Musicians can vary pitch, tone, and loudness by controlling the vibration of their lips. (It takes practice!)

The valves are the buttons on brass instruments. Valves or slides on brass instruments allow the player to change the length of the tube and create different sounds and notes. The tube is called the bore and the part that flares out wide at the end is called the bell. The shape and size of the bore and the bell can change the tone of the instrument. For example, the shorter length and smaller bell on a trumpet creates a crisp, blaring tone. A French Horn, with its longer bore and larger bell, has a warm, mellow tone.

Bring in the strings!

The string section includes violins, violas, cellos, and double basses. The sound of these instruments ranges from soft and sweet — to harsh and severe — to soaring and majestic.

The sound of stringed instruments is caused by the vibrations of the strings. A player rubs a bow against the strings, or strums or plucks them with his or her fingers. The player controls the pitch of the sound by making the strings longer or shorter — and tighter or looser. (Shorter and tighter strings create higher pitches. Longer and looser strings create lower pitches.)

We got the beat!

The percussion section holds the drums, chimes, gongs, cymbals, and whistles. These instruments provide pounding rhythms, booming drum rolls, and driving energy.

The sound is produced by one object hitting another, which is what the word "percussion" means. Percussion instruments are either "tuned" or "untuned." Tuned instruments, such as the xylophones, chimes, or the timpani, play specific pitches or notes. Untuned instruments, such as most drums, cymbals, the gong, and the triangle, produce sounds with an indefinite pitch.

Drums come in many shapes and sizes but in each, a membrane is stretched across a frame or hollow container. When the membrane is struck with a stick or mallet, it sends vibrations echoing within the container. Every country in the world has its own version of the drum.

And now for the woodwinds!

The woodwind section is home to flutes, oboes, clarinets, and bassoons. Woodwinds can carry the melody over the quietest and the loudest parts of a musical work. Some think they come closest to the quality of the human singing voice.

The sound comes from blowing air into or across the mouthpiece. In the flute family of instruments, air is blown across an edge, like blowing across the mouth of a bottle. The air is split by the edge, resulting in vibrations. In reed instruments, the air travels across of thin piece of wood, called a reed. Clarinets and saxophones have one reed. Oboes and bassoons have two reeds that vibrate against each other.

The manner of creating the sound may vary between the flute and the reed instruments but the manner of controlling the tone remains the same. Woodwind players cover holes on the long tubes of woodwind instruments. Sometimes the holes are covered by fingers. On longer instruments, the musician presses a metal key that raises a soft pad that had been covering a hole.



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